EXHIBIT 4

Marjorie McShane

Professor, Cognitive Science Department
Co-Director LEIA (Language-Endowed Intelligent Agents) Lab
Rensselaer Polytechnic Institute
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My university website is here
This is an abbreviated version of my CV.

Research Interests

Reference and ellipsis
Computational semantics
Language-endowed intelligent agents
Mindreading (mental model ascription)
Knowledge representation
Simulation and tutoring as substrates for the development of conversational intelligent agents
Computer-based knowledge elicitation

Educational Preparation

1998 Ph.D., Princeton University, Slavic Languages and Literatures

1996 M.A., Princeton University, Slavic Languages and Literatures

1992 Russian-English Advanced Translation Certificate Program, State University of New York at Albany

1992 M.A., State University of New York at Albany, Russian

1989 B.A., Grinnell College, Russian

Professional Experience

2022-	Professor, Cognitive Science Department, and Co-director of the Language-Endowed Intelligent Agents (LEIA) lab, Rensselaer Polytechnic Institute.
2017-2021	Associate Professor with tenure, Cognitive Science Department, and Co-director of the Language-Endowed Intelligent Agents (LEIA) lab, Rensselaer Polytechnic Institute.
2013-2016	Associate Professor without tenure, Cognitive Science Department, and Co-director of the Language-Endowed Intelligent Agents (LEIA) lab, Rensselaer Polytechnic Institute.
2007-2013	Research Associate Professor, Department of Computer Science and Electrical Engineering, University of Maryland Baltimore County; Computational Linguist & Knowledge Engineer, Institute for Language and Information Technologies, University of Maryland Baltimore County.
2002-2007	Research Assistant Professor, Department of Computer Science and Electrical Engineering, University of Maryland Baltimore County; Computational Linguist & Knowledge Engineer, Institute for Language and Information Technologies, University of Maryland Baltimore County.
2005-2014	Adjunct faculty member, Department of Surgery, University of Maryland School of Medicine.
2000-2002	Senior Computational Linguist, Computing Research Laboratory, New Mexico State University.

1998-2000	Analyst, Computing Research Laboratory, New Mexico State University.

Research Grants

2020-2021	McShane, M. Principal Investigator. "Improving System Engineering Using Knowledge Engineering with UML." Office of Naval Research. 01/01/2020 - 12/31/2021. $394,178. Award # N00014-20-1-2051.
2019-2022	McShane, M., Principal Investigator. "Natural Language Understanding by Intelligent Collaborators." Office of Naval Research. 9/15/2019 - 9/14/2022. $995,440. Award # N00014-19-1-2708.
2016-2019	McShane, Principal Investigator. "Naturalistic Dialog Understanding". Office of Naval Research. 1/1/16 - 5/31/19. $861,455.
2013-2016	McShane, M., Principal Investigator. "MURI: Unified Theories of Language and Cognition." Office of Naval Research. 2013-2015: $2,034,071. 2016 Supplementary Award: $250,000. *This MURI was originally granted to Principal Investigator N. Cassimatis in 2009. From 2009-2013, Cassimatis was awarded $5,700,664.*
2008-2009	McShane, M., Principal Investigator. "SGER: Advances in Difficult Aspects of Reference Resolution." National Science Foundation. $109,321.[Base award: $98,196. Research Experience for Undergraduates supplement: $11,125.]
2006-2007	McShane: Principal Investigator. "GeoMatch Multilingual GNDB Prototype Project." Department of Defense. $175,000.
2007	McShane, M., Co-Principal Investigator. "Modality Annotation." Department of Defense. $75,000.
2004-2009	McShane, M., Co-Principal Investigator. "Maryland Virtual Patient" - a subcontract from the DoD's Operating Room of the Future program. Approximately $1,400,000.

Patent

Jarrell, B., Nirenburg, S., McShane, M., Beale, S. and Fantry, G. Techniques for Implementing Virtual Persons in a System to Train Medical Personnel. Patent application 11/672,161 was filed on 2/7/2007, resulting in issued US patent #8,317,518 with an issue date of 11/27/2012.

Books

McShane, M., and Nirenburg, S. 2021. **Linguistics for the Age of AI**. The MIT Press. The ebook is available open access here.

McShane, Marjorie. 2005. **A Theory of Ellipsis**. Oxford University Press.

McShane, M. 2003. **An Innovative, Practical Approach to Polish Inflection**. Lincom Europa. Preprint

Dissertation

McShane, M. 1998. **Ellipsis in Slavic: The Syntax-Discourse Interface**. Unpublished Ph.D. Dissertation, Princeton University.

Journal Articles, Refereed

McShane, M. and S. Nirenburg. 2019. **Context for language understanding by intelligent agents.** Applied Ontology 14: 415-449.

McShane, M. 2018. **Typical event sequences as licensors of direct object ellipsis in Russian.** Lingvisticæ Investigationes 41(2): 179-212. pdf

McShane, M., S. Nirenburg and J. English. 2018. **Multi-stage language understanding and actionability.** Advances in Cognitive Systems 6: 119-138. pdf

McShane, M. and Babkin, P. 2016. **Resolving difficult referring expressions**. Advances in Cognitive Systems 4: 247-263. pdf

McShane, M. and Babkin, P. 2016. **Detection and resolution of verb phrase ellipsis**. Linguistic Issues in Language Technology (LiLT). pdf

McShane, M., Nirenburg, S. and Beale, S. 2016. **Language understanding with Ontological Semantics**. Advances in Cognitive Systems 4:35-55. pdf

McShane, M., Nirenburg, S. and Beale, S. 2015. **The Ontological Semantic treatment of multiword expressions. Lingvisticæ Investigationes**, 38(1): 73-110. John Benjamins Publishing Company. pdf

McShane, M. 2014. **Parameterizing mental model ascription across intelligent agents**. Interaction Studies, 15(3): 404-425. pdf

McShane, M., Beale, S., and Babkin, P. 2014. **Nominal compound interpretation by intelligent agents**. Linguistic Issues in Language Technology (LiLT), 10(1): 1-34. pdf

McShane, M., Nirenburg, S., and Jarrell, B. 2013. **Modeling decision-making biases**. Biologically-Inspired Cognitive Architectures (BICA) Journal, 3: 39-50. pdf

McShane, M. and Nirenburg, S. 2012. **A knowledge representation language for natural language processing, simulation and reasoning**. International Journal of Semantic Computing, 6(1): 3-23. pdf

McShane, M., Beale, S., Nirenburg, S., Jarrell, B. and Fantry, G. 2012. **Inconsistency as a diagnostic tool in a society of intelligent agents**. Artificial Intelligence in Medicine, 55(3): 137-48. pdf

McShane, M., Nirenburg, S., Beale, S. and Johnson, B. 2012. **Resolving elided scopes of modality in OntoAgent**. Advances in Cognitive Systems, 2: 95-112. pdf

McShane, M. 2009. **Reference resolution challenges for an intelligent agent: The need for knowledge**. IEEE Intelligent Systems, 24(4): 47-58. pdf

McShane, M. 2009. **Subject ellipsis in Russian and Polish**. In Holmberg, A. (Ed.), Special Issue on Partial Pro-Drop, Studia Linguistica, 63(1): 98-132. Cambridge University Press. pdf

Java, A., Nirenburg, S., McShane, M., Finin, T., English, J. and Joshi, A. 2007. **Using a natural language understanding system to generate Semantic Web content**. International Journal on Semantic Web & Information Systems, 3(4): 50-74. pdf

McShane, M., Nirenburg, S. and Beale, S. 2005. **An NLP lexicon as a largely language independent resource**. Machine Translation, 19(2): 139-173. pdf

McShane, M., Nirenburg, S. and Beale, S. 2005. **Semantics-based resolution of fragments and underspecified structures**. Traitement Automatique des Langues, 46(1): 163-184. pdf

McShane, M., Nirenburg, S. and Zacharski, R. 2004. **Mood and modality: Out of theory and into the fray**. Natural Language Engineering, 19(1): 57-89. pdf

McShane, M. 2003. **Redefining "paradigm" for (computer-aided) language instruction**. Foreign Language Annals, 36 (2): 198-207. pdf

McShane, M. 2003. **Applying tools and techniques of natural language processing to the creation of resources for less commonly taught languages**. IALLT Journal of Language Learning Technologies, 35(1): 25-46. pdf

McShane, M. and Nirenburg, S. 2003. **Blasting open a choice space: learning inflectional morphology for NLP**. Computational Intelligence, 19(2): 111-135. pdf

McShane, M. and Nirenburg, S. 2003. **Parameterizing and eliciting text elements across languages**. Machine Translation, 18(2): 129-165. pdf

McShane, M. 2002. **So where's that noun?** Rusistika, 26: 7-14. pdf

McShane, M. 2002. **Unexpressed objects in Russian**. Journal of Slavic Linguistics, 10(1): 291-328. pdf

McShane, M., Nirenburg, S., Cowie, J. and Zacharski, R. 2002. **Embedding knowledge elicitation and MT systems within a single architecture**. Machine Translation 17(4): 271-305. pdf

Oflazer, K., Nirenburg, S. and McShane, M. 2001. **Bootstrapping morphological analyzers by combining human elicitation and machine learning**. Computational Linguistics 27(1): 59-85. pdf

McShane, M. 2000. **Hierarchies of parallelism in elliptical Polish structures**. Journal of Slavic Linguistics, 8: 83-117. pdf

McShane, M. 2000. **Verbal ellipsis in Russian, Polish and Czech**. Slavic and East European Journal 44(2): 195-233. pdf

McShane, M. 1999. **The ellipsis of accusative direct objects in Russian, Polish and Czech**. Journal of Slavic Linguistics 7(1): 45-88. pdf

Invited Book Chapters and Journal Articles

Hudlicka, E., and M. McShane. Forthcoming. **The case for deep models of emotions in affective human-computer interaction.** The Handbook of Language and Emotion. De Gruyter Mouton.

McShane, M. Forthcoming. **Null subjects and objects.** In Bermel, N. (Ed.), The Oxford Guide to the Slavonic Languages, part of the Oxford Guides to the World's Languages. Oxford University Press.

McShane, M., and Nirenburg, S. Forthcoming. **Natural language understanding and generation.** In Sun, R. (Ed.), The Cambridge Handbook on Computational Cognitive Sciences.

McShane M., Bringsjord, S., Hendler, J., Nirenburg, S., and Sun, R. 2019. **A response to Nunez et al.'s (2019) "What Happened to Cognitive Science?".** Topics in Cognitive Science, pp. 1-4. ISSN: 1756-8765 (online), DOI: 10.1111/tops.12458.

McShane, M. 2017. **Choices for semantic analysis in cognitive systems.** Advances in Cognitive Systems, 5: 25-36. pdf

McShane, M. 2017. **Natural language understanding (NLU, not NLP) in cognitive systems.** AI Magazine, 34(4): 43-56. pdf

Nirenburg, S. and McShane, M. 2016. **Natural language processing**. In Chipman, S. (Ed.), The Oxford Handbook of Cognitive Science, Volume 1. New York: Oxford University Press. Online publication date: August 2016.

McShane, M. and Nirenburg, S. 2013. **Use of ontology, lexicon and fact repository for reference resolution in Ontological Semantics**. In Oltramari, A., Vossen, P., Qin, L. and Hovy, E. (Eds.), New Trends of Research in Ontologies and Lexical Resources. Part of the Springer Publishing series Theory and Applications of Natural Language Processing, pp. 157-185. pdf

McShane, M. 2009. **Developing proper name recognition, translation and matching capabilities for low- and middle-density languages**. In Nirenburg, S. (ed.), Language Engineering for Lesser-Studied Languages. IOS Press, pp. 81-115. pdf

Nirenburg, S. and McShane, M. 2009. **Computational field semantics: Acquiring an Ontological Semantic lexicon for a new language**. In Nirenburg, S. (ed.), Language Engineering for Lesser-Studied Languages. IOS Press, pp. 183-206. pdf

McShane, M., Nirenburg, S. and Beale, S. 2008. **Ontology, lexicon and fact repository as leveraged to interpret events of change**. In Huang, C., Calzolari, N., Gangemi, A., Lenci, A., Oltramari, A. and Prevot, L. (Eds.), Ontology and the Lexicon: A Natural Language Processing Perspective, pp. 98-121. Cambridge University Press. pdf

Lubensky, S. and McShane, M. 2007. **Bilingual phraseological dictionaries**. In Burger, H., Dobrovol'skij, D., Kühn, P., and Norrick, N.R. (Eds.), Phraseologie / Phraseology: Ein internationales Handbuch zeitgenössischer Forschung / An International Handbook of Contemporary Research. Mouton de Gruyter, pp. 919-928. pdf

McShane, M. 2002. **Out of the box**. In Janda, L.A., Franks, S. and Feldstein, R. (Eds.), Where One's Tongue Rules Well: A Festschrift for Charles E. Townsend. Indiana Slavic Studies 13: 147-155. pdf

Proceedings, Refereed

Nirenburg, S., M. McShane, and J. English. 2020. **Content-centric computational cognitive modeling.** Proceedings of the Seventh Annual Conference on Advances in Cognitive Systems.pdf

McShane, M., S. Beale, and I. Nirenburg. 2019. **Applying deep language understanding to open text: Lessons learned.** Proceedings of the 41st Annual Meeting of the Cognitive Science Society, Montreal, Canada, pp. 796-802. pdf

McShane, M.. and E. Kleine. 2019. **Pursuing actionable interpretations of non-literal language.** Proceedings of the Seventh Annual Conference on Advances in Cognitive Systems, pp. 453-471. pdf

Nirenburg, S., M. McShane, S. Beale, P. Wood, B. Scassellati, O. Mangin, and A. Roncone. 2018. **Toward hu/Users/marjoriemcshane/Desktop/Content-CentricJuly9.pdfman-like robot learning.** Natural Language Processing and Information Systems, Proceedings of the 23rd International Conference on Applications of Natural Language to Information Systems (NLDB 2018), pp. 73-82. pdf

Nirenburg, S. and M. McShane. 2018. **Two types of autonomous, language-endowed learning agents for human autonomy teaming.** Proceedings of NATO-HFM-300 symposium on Human

Autonomy Teaming. Portsmouth, UK, October.

McShane, M., Blissett, K. and Nirenburg, I. 2017. **Treating unexpected input in incremental semantic analysis.** Proceedings of the Fifth Annual Conference on Advances in Cognitive Systems. pdf

Nirenburg, S. and M. McShane. 2017. **Contextual Knowledge for Language-Endowed Intelligent Agents.** The AAAI 2017 Spring Symposium on Computational Context: Why It's Important, What It Means, and Can It Be Computed? Technical Report SS-17-03, pp. 342-346. pdf

McShane, M. and Nirenburg, S. 2016. **Extra-specific multiword expressions for language-endowed intelligent agents.** Proceedings of the COLING 2016 Workshop, Grammar and Lexicon: Interactions and Interfaces. pdf

Nirenburg, S. and McShane, M. 2016. **Slashing metaphor with Occam's Razor.** Proceedings of The Fourth Annual Conference on Advances in Cognitive Systems. pdf

McShane, M. and S. Nirenburg. 2016. **Decisions for semantic analysis in cognitive systems.** Proceedings of The Fourth Annual Conference on Advances in Cognitive Systems. pdf

McShane, M. and Nirenburg, S. 2015. **OntoAgents gauge their confidence in language understanding**. In Ahmed, N., Cummings, M., and Mille, C. (Eds.), Self-Confidence in Autonomous Systems: Papers from the AAAI Fall Symposium. Technical report FS-15-05, pp. 22-29. Menlo Park, CA: AAAI Press. pdf

McShane, M., and Babkin, P. 2015. **Automatic ellipsis resolution: Recovering covert information from text**. Proceedings of Twenty-Ninth AAAI Conference on Artificial Intelligence (AAAI-15), pp. 572-578. Association for the Advancement of Artificial Intelligence. pdf

McShane, M., Nirenburg, S., Jarrell, B., and Fantry, G. 2015. **Learning components of computational models from texts**. In Finlayson, M. A., Miller, B., Lieto, A. and Ronfard, R. (Eds.), Proceedings of the 6th Workshop on Computational Models of Narrative (CMN'15), pp. 108-123. Published in the Open Access Series in Informatics [OASIcs], Schloss Dagstuhl - Leibniz-Zentrum für Informatik, Dagstuhl Publishing, Germany. pdf

Nirenburg, S. and McShane, M. 2015. **The interplay of language processing, reasoning and decision-making in cognitive computing**. In Biemann, C., Handschuh, S., Freitas, A., Meziane, F. and Métais, E. (Eds.), Natural Language Processing and Information Systems, Proceedings of the 20th International Conference on Applications of Natural Language to Information Systems (NLDB 2015), pp. 167-179. Springer Lecture Notes in Computer Science 9103. pdf

McShane, M. 2015. **Expectation-driven treatment of difficult referring expressions**. Proceedings of the Third Annual Conference on Advances in Cognitive Systems (ACS-2015), Article 11. pdf

McShane, M. and Nirenburg, S. 2015. **Decision-making during language understanding by intelligent agents**. Artificial General Intelligence, Volume 9205 of the series Lecture Notes in Computer Science, pp. 310-319. pdf

McShane, M., Nirenburg, S. and Babkin, P. 2015. **Sentence trimming in service of verb phrase ellipsis resolution**. Proceedings of the EuroAsianPacific Joint Conference on Cognitive Science (EAP CogSci 2015). Volume 1419 of CEUR Workshop Proceedings, CEUR-WS.org, pp. 228-233. pdf

McShane, M. 2014. **A multi-faceted approach to reference resolution in English and Russian**. In Selegei, V. P. (Chief Editor), Computational Linguistics and Intellectual Technologies, Papers from the Annual International Conference "Dialogue", Issue 13, pp. 391-409. pdf

McShane, M., Nirenburg, S., Beale, S., Jarrell, B., Fantry, G. and Mallott, D. 2013. **Mind-, body- and emotion-reading**. Proceedings of the Annual Meeting of the International Association for Computing and Philosophy (IACAP 2013). pdf

Nirenburg, S. and McShane, M. 2012. **Agents modeling agents: Incorporating ethics-related reasoning**. Proceedings of the Symposium on Moral Cognition and Theory of Mind at the AISB/IACAP World Congress, 2012. pdf

McShane, M., Nirenburg, S., and Beale, S. 2011. **Reference-related memory management in intelligent agents emulating humans**. In: Langley, P. (Ed.), Advances in Cognitive Systems. Papers from the AAAI Fall Symposium, pp. 232-239. AAAI technical report FS-11-01. Menlo Park, CA: AAAI Press. 2011. pdf

Nirenburg, S., McShane, M., and Beale, S. 2010. **Hybrid methods of knowledge elicitation within a unified representational knowledge scheme**. In: Filipe, J. and Dietz, J.L.G. (Eds.) Proceedings of the International Conference on Knowledge Engineering and Ontology Development (KEOD 2010), pp. 177-192. SciTePress. pdf

Nirenburg, S., McShane, M. and Beale, S. 2010. **Aspects of metacognitive self-awareness in Maryland Virtual Patient**. In Pirrone, R., Azevedo, R. and Biswas, G. (Eds.), Cognitive and Metacognitive Educational Systems: Papers from the AAAI Fall Symposium. AAAI Technical Report FS-10-01, pp. 69-74. Association for the Advancement of Artificial Intelligence. pdf

Nirenburg, S., McShane, M., Beale, S., English, J. and Catizone, R. 2010. **Four kinds of learning in one agent-oriented environment**. In Samsonovich, A.V., Jóhannsdóttir, K.R., Chella, A., Goertzel, B. (Eds.), Biologically Inspired Cognitive Architectures 2010: Proceedings of the First Annual Meeting of the BICA Society, pp. 92-97. Amsterdam; Tokyo; Berlin; Washington, DC: IOS Press. pdf

McShane, M., Beale, S., and Nirenburg, S. 2010. **Reference resolution supporting lexical disambiguation**. Proceedings of the Fourth IEEE International Conference on Semantic Computing, pp. 16-23. pdf

McShane, M., S. Nirenburg, B. Jarrell, S. Beale, G. Fantry. 2009. **Maryland Virtual Patient: A knowledge-based, language-enabled simulation and training system**. Bio-Algorithms and Med-Systems: 5(9): 57-63. pdf

Nirenburg, S., McShane, M., Beale, S., Jarrell, B. and Fantry, G. 2009. **Integrating cognitive simulation into the Maryland Virtual Patient.** In Westwood, J. D., Westwood, S. W., et al. (Eds.), Medicine Meets Virtual Reality 17, pp. 224-229. In the series Studies in Health Technology and Informatics. Amsterdam, Berlin, Oxford, Tokyo, Washington, DC: IOS Press. pdf

McShane, M., and Nirenburg, S. 2009. **Dialog modeling within intelligent agent modeling**. In Jönsson, A., Alexandersson, J., Traum, D., Zukerman, I. (Eds.), Proceedings of the 6th IJCAI Workshop on Knowledge and Reasoning in Practical Dialog Systems. pp. 52-59. pdf

Nirenburg, S., McShane, M. and Beale, S. 2009. **A unified ontological-semantic substrate for physiological simulation and cognitive modeling**. In Proceedings of the International Conference on Biomedical Ontology (ICBO-2009), pp. 139-142. pdf

Nirenburg, S., McShane, M., and Beale, S. 2008. **Resolving paraphrases to support modeling language perception in an intelligent agent**. In Bos, J., Delmonte, R. (Eds.), Semantics in Text Processing: STEP 2008 Conference Proceedings, pp. 179-192. London: College Publications. pdf

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from the AAAI Fall Symposium, pp. 162-167. AAAI Technical Report FS-08-04. Menlo Park, CA: AAAI Press. pdf

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McShane, M., Beale, S. and Nirenburg, S. 2006. **The semantics of backing up (Or: What do to with prepositions and particles?)**. In Sutcliffe, G. C. J. and Goebel, R. G. (Eds.), Proceedings of the Nineteenth International Florida Artificial Intelligence Research Society Conference, Session on Trends in Natural Language Processing, pp. 770-775. pdf

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Beale, S., Lavoie, B., McShane, M., Nirenburg, S. and Korelsky, T. 2004. **Question answering using Ontological Semantics**. In Hirst, G. and Nirenburg, S. (Eds.) Proceedings of the Workshop on Text Meaning and Interpretation, pp. 41-48. Held in cooperation with the 42nd Annual Meeting of the Association for Computational Linguistics (ACL-2004). Stroudsburg, PA: Association for Computational Linguistics. pdf

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Nirenburg, S., McShane, M. and Beale, S. 2003. **Operative strategies in Ontological Semantics**. Proceedings of HLT-NAACL-03 Workshop on Text Meaning, Edmonton, Alberta, Canada.pdf

McShane, M. 2001. **One formal approach leads to another.** In Franks, S., King, T. H. and Yadroff, M. (Eds.), Annual Workshop on Formal Approaches to Slavic Linguistics: The Bloomington Meeting, 2000, 191-207. Ann Arbor, Michigan: Michigan Slavic Publications. pdf

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Encyclopedia Entries

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Developmental Editing

I served as Developmental Editor for **The Random House Russian-English Dictionary of Idioms**, by S. Lubensky. Random House, 1995. I essentially worked as a coauthor of this work for two complete rewrites over 5 years, including writing all of the explanatory, introductory materials. Excerpts

Editing

Bello, P., Guarini, M., McShane, M. and Scassellati, B. (Eds.). 2014. **Proceedings of the 36th Annual Conference of the Cognitive Science Society.** Austin, TX: Cognitive Science Society.

McShane, M. (Ed.) 2014. Guest edited a special issue of *Interaction Studies* entitled **Mental Model Ascription by Intelligent Agents.**

Book Review in Refereed Journal

McShane, M. 2007. Review of the book *Lingvističeskie problemy komp'juternoj morfologii* [Linguistic Issues in Computational Morphology, written in Russian] by S. A. Koval'. St. Petersburg: St. Petersburg University Press, 2005, 151 pp; paperbound, ISBN 5-288-03731-0. Review appeared in Computational Linguistics, vol. 33 issue 2.

Technical Reports

Baker, K., Bloodgood, M., Diab, M., Dorr, B., Hovy, E., Levin, L., McShane, M., Mitamura, T., Nirenburg, S., Piatko, C., Rambow, O. and Richardson, G. 2010. **SIMT SCALE 2009 Modality Annotation Guidelines.** Human Language Technology Center of Excellence (HLTCOE) Technical Report #4. pdf

McShane, M. 2009. **Advances in difficult aspects of reference resolution: Working Notes**. ILIT Working Paper #01-09, Nov. 18, 2009 (62 pp.). pdf

McShane, M. 2009. **Advances in difficult aspects of reference resolution: Project Report for SGER**. ILIT Working Paper #03-09, Nov. 19, 2009. pdf

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McShane, Marjorie, Stephen Beale and Sergei Nirenburg. 2005. **Disambiguating homographous prepositions and verbal particles in an implemented Ontological Semantic analyzer**. Working Paper #01-05, Institute for Language and Information Technologies, University of Maryland Baltimore County. pdf

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McShane, Marjorie, Ron Zacharski and Sergei Nirenburg. 2005. **From knowledge elicitation system to teaching tool**. Working Paper #04-05, Institute for Language and Information Technologies, University of Maryland Baltimore County. pdf

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Courses Taught

At University of Maryland Baltimore County

- Programming Languages

At Rensselaer Polytechnic Institute

- Introduction to Linguistics
- The Linguistics of Computational Linguistics
- Cross-linguistic Perspectives
- Semantics and Discourse
- Advanced Topics in Linguistics
- Animal Cognition and Interaction with Humans

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